

## K ARS CLEAN WATER ACT PROGRAM (Continued)

1) Secondary treatment - from date of permit issuance.

2) Best practicable waste treatment technology by July 1, 1983.

(b) Discharges Other than POTW's.

1) Best practicable control technology currently available (BPT) - from the date of permit issuance.

2) For conventional pollutants - best conventional pollutant control technology (BCT) by July 1, 1984.

3) For certain identified toxic pollutants best available technology economically achievable (BAT) - July 1, 1984.

4) For all other toxic pollutants - BAT not later than 3 years after the date such conditions are incorporated into an NPDES permit.

5) For all pollutants which are neither toxic nor conventional, BAT not later than 3 years after the date such conditions are incorporated into an NPDES permit.

Variances and extensions may be available for alternative treatment technology effluent limitations, and for extending compliance deadlines. See 40 CFR Parts 122 through 125 for details.

(3) Section 302 - Provides for establishment of effluent limitations which may be more stringent than technology based standards under Section 301. These limitations are based on the attainment or maintenance of water quality which assures protection of public water supplies, agricultural and

industrial uses, the protection and

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propagation of a balanced population of shellfish, fish, and wildlife, and allows recreation activities in or on the water.

(4) Section 303 - Water quality standards developed by States serve the dual purposes of establishing the water quality goals for a specific water body and serving as the regulatory basis for establishment of water quality based treatment controls and strategies beyond the technology based levels of treatment. State water quality standards include among other items the following:

(a) Designation of water use.

(b) Water quality criteria to protect the designated uses.

(c) An antidegradation policy.

(d) Methods and analyses to support any water quality standards revisions.

See 40 CFR Part 131 for details.

(5) Section 306 - The EPA establishes Federal standards for performance for various categories of new sources. These standards are primarily based on the application of the best available technology economically achievable including, where practicable, a standard permitting no discharge of pollutants. The categories of sources for which performance standards are developed include:

(a) pulp and paper mills.

(b) meat product and rendering processing.

(c) dairy product processing.

(d) grain mills.

(e) feed lots.

(f) sugar processing.

See 40 CFR for details.

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(6) Section 307 - Toxic pollutants are subject to effluent limitations which result from the application of BAT for the applicable category or class of point sources. Among the toxic pollutants covered are:

(a) Aldrin/Dieldrin.

(b) DDT, DDD, and DDE.

(c) Endrin.

(d) Toxaphene.

(e) Benzidine.

(f) Polychlorinated biphenyls (PCB's).

See 40 CFR Part 129 for details.

(7) Section 311 - Establishes procedures, methods, and other requirements to prevent the discharge of oil from non-

transportation related onshore and off-shore facilities into or upon navigable waters. This includes preparation and implementation of Spill Prevention Control and Countermeasures (SPCC) plans, designated to complement existing laws, regulations, standards, and policies pertaining to safety standards, fire prevention, and pollution prevention. See 40 CFR Part 112 and the National Contingency Plan (NCP) for details.

(8) Section 314 - Establishes a State program which includes the following:

(a) an identification and classification according to eutrophic conditions of all publicly owned lakes in the State.

(b) a description of procedures, processes, and methods (including land use requirements), to control sources of pollution of such lakes.

(c) a description of methods and procedures, in conjunction with appropriate Federal agencies, to restore the quality of such lakes.

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(d) methods and procedures to mitigate the harmful effects of high acidity and methods of removing

from lakes toxic metals and other toxic substances mobilized by high acidity.

(e) a list and description of those publicly owned lakes in each State for which uses are known to be impaired, including those lakes which are known not to meet applicable water quality standards or which require implementation of control programs to maintain compliance with standards and those lakes in which water quality has deteriorated as a result of high acidity that may reasonably be due to acid deposition.

(f) an assessment of the status and trends of water quality in lakes in each State, including the nature and extent of pollution from point and nonpoint sources and the extent to which the use of the lakes is impaired as a result of the pollution.

This section also provides for EPA to establish and conduct a lake water quality demonstration program throughout the Nation.

(9) Section 319 - Establishes a nonpoint source management program which includes the following assessments and management actions by States.

(a) Identification of those navigable waters within the State which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards or the goals and requirements of the Clean Water Act.

## K ARS CLEAN WATER ACT PROGRAM (Continued)

(b) Identification of those categories and subcategories of nonpoint sources which add significant pollution to sections of navigable waters in amounts which cause these sections not to meet applicable standards or goals and requirements.

(c) Description of the process, including intergovernmental coordination and public participation, for identifying best management practices (BMP) and measures to control each category and subcategory of nonpoint sources and to reduce, to the maximum extent practicable, the level of pollution resulting from each source. An identification of the BMP program which will be undertaken to implement reduction of pollution, taking into account the impact of the practice on ground water quality.

(d) Identification and description of State and local programs for controlling pollution from nonpoint sources.

(e) An identification of regulatory or nonregulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects to achieve implementation of the BMP program.

(f) Schedule for program implementation.



(g) Authorities for State implementation of the management programs.

(10) Section 401 - Provides for State review and certification of any facility or activity which may result in any discharge into navigable waters, to assure that applicable effluent limitations or water quality requirements will not be violated. States may establish conditions which are more stringent than Federal requirements. See 40 CFR Part 121.

#### K ARS CLEAN WATER ACT PROGRAM (Continued)

(11) Section 402 - Establishes regulations for the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program requires permits for the discharge of pollutants for any point source into navigable waters of the United States. There are some exclusions which are important to ARS Locations. The following discharges do not require NPDES permits.

(a) Introduction of sewage, industrial wastes, or other pollutants into publicly owned treatment works by indirect discharge.

(b) Any introduction of pollutants from nonpoint-source agricultural and silvicultural activities, including runoff from orchards, cultivated crops, pastures, range and forest lands.

(c) Return flows from irrigated agriculture.

However, discharges from concentrated animal feeding operations, concentrated aquatic animal production facilities, discharges to aquaculture projects, and discharges from silvicultural point sources do require NPDES permits.

ARS Locations who discharge, or propose to discharge, pollutants must apply and have an effective NPDES permit. This permit establishes conditions for discharge, including effluent limitations, sampling and monitoring requirements, and reporting and recordkeeping requirements. The permit may also specify a schedule of compliance if the existing facility does not meet permit conditions. See 40 CFR Part 122 for details.

#### K ARS CLEAN WATER ACT PROGRAM (Continued)

(12) Section 403 - Establishes guidelines for issuing NPDES permits for the discharge of pollutants from a point source into the territorial seas, the contiguous zone, and the oceans. See 40 CFR Part 125 Subpart M, for details.

(13) Section 404 - Provides for establishing guidelines for the control of discharges for dredge or fill material into the waters of the United States. The guidelines are applicable to the specification of disposal sites through the following:

(a) Regulatory program of the U.S. Army Corps of Engineers (COE) (See 33 CFR Parts 320, 323 and 325).

(b) Civil Works Program of the COE (See 33 CFR Part 209.145).

(c) Permit programs of States approved by the EPA (See 40 CFR Parts 122, 123, and 124).

(d) Statewide dredged or fill material regulatory programs with approved best management practices (BMP's) (See 40 CFR 35.1560).

(e) Federal construction projects which meet criteria specified in Section 404(r).

Discharges of dredged or fill material are authorized through a permitting process which provides for either a general 404 permit or an individual 404 permit. A general permit authorizes a category of discharges within a geographical area. An individual permit authorizes a specific point source discharge of dredged or fill material. Permit requirements and details are given in the CFR sections noted herein.

## K ARS CLEAN WATER ACT PROGRAM (Continued)

There are certain activities that are not subject to regulations or permitting. With some restrictions these include:

(a) Normal farming, silviculture and ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices.

(b) Maintenance, including emergency reconstruction of recently damaged components of currently serviceable structures such as dikes, dams, levees, groins, riprap, deadwaters, causeways, bridge abutments or approaches, and transportation structures.

(c) Construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance (but not construction) of drainage ditches.

(d) Construction of temporary sedimentation basins on a construction site which does not include placement of fill material into waters of the United States.

(e) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining

equipment, where such roads are constructed and maintained in accordance with best management practices to assure that flow and circulation patterns and chemical and biological characteristics of the waters of the U.S. are not impaired, that the reach of the waters of the U.S. are not reduced, and that any adverse effect on the

## K ARS CLEAN WATER ACT PROGRAM (Continued)

aquatic environment will be minimized. The BMP's shall include those detailed in a State's approved program and additional baseline provisions. See CFR 40 Part 233 for details.

Notwithstanding the exemptions noted, the previous activities may require a 404 permit if associated with modification or conversion of a wetland or other aquatic area.

## 8 Compliance With Standards

### a General

Section 313 of the Clean Water Act requires Federal agencies to comply with substantively and procedurally with the statute to the same extent as non-government entities.

### b Existing Facilities or Activities

(1) Point Source Discharges. National Pollutant Discharge Elimination System (NPDES) permits contain legally enforceable compliance schedules which establish dates by which facilities must be in compliance with any applicable requirement of the permit. Facilities that do not have a direct discharge NPDES permit must be in compliance with the established statutory deadlines for technology based treatment requirements for the particular type of facility and/or pollutant. Dredge and fill activities must be in compliance with COE permit requirements.

(2) State 208 and water quality plans contain procedures and methods for controlling nonpoint source pollution. The Water Quality Act of 1987, which amended the CWA, reaffirmed that States have primary responsibility for water quality protection. Section 319 requires States develop a report which describes a process for identifying best management practices to reduce nonpoint source pollution to the maximum extent practicable, and a State management plan to implement such control.

#### K ARS CLEAN WATER ACT PROGRAM (Continued)

As part of this plan, States are to identify Federal actions that are inconsistent with their water quality objectives.

All actions necessary to have existing ARS facilities or activities conform with applicable requirements for point sources shall be in accordance with established compliance schedules. For nonpoint sources, ARS Locations should develop a nonpoint source management strategy in accordance with the ARS nonpoint source water quality policy (DR 9500-7). Location management strategies should be incorporated into State water quality management plans and regulatory programs, including the activities and programs authorized by Sections 314 and 319. Locations should cooperate with States in the development of water quality programs for both Federal and non-Federal lands.

Where Federal actions are inconsistent with State objectives, ARS will make efforts to accommodate State concerns or, if concerns cannot be accommodated, explain why they cannot be.

#### c Time Extensions

ARS may submit requests for time extensions from the statutory deadlines or permit compliance schedules based on a number of different factors including installation of innovative technology, modification of secondary treatment requirements, and others. See 40 CFR Part 125 for details.

#### d Variances

ARS may request variances for technology based treatment requirements based on water quality, fundamentally different factors, and economics. 40 CFR Part 125 contains additional details.

#### e Performance Standards

Contact the appropriate EPA Regional Office or State Water Quality Control Agency for required performance standards for individual existing facilities or activities where action is needed to achieve compliance.

#### K ARS CLEAN WATER ACT PROGRAM (Continued)

## f New Facilities

(1) General. New facilities shall be planned, designed, and constructed so that they will not cause a violation of any effluent limitation, permit condition, or control strategy or interfere with the attainment or maintenance of Federal or State water quality standards through discharge of pollutants. Nonpoint source related activities shall be conducted in accordance with approved nonpoint source management strategy.

(2) Performance Standards. Where action is necessary to comply with EPA, COE, or State discharge permits or applicable water quality standards, the appropriate EPA Regional Office, Corps District Office, or State water quality control agency should be contacted at the earliest

possible stage of planning with regard to formulation of performance requirements.

## 9 Technical Assistance

Assistance and technical publications may be obtained from the EPA through their Regional Office Federal Facility Coordinator and from State and local water quality control agencies.

## 10 Operator Training

Many States have mandatory certification programs for wastewater treatment plant operators. Where



this is the case, operators of Federal facilities must be State certified. Other States have voluntary certification requirements. In these instances, Federal facility operators should receive the training necessary to meet the levels of proficiency consistent with the requirements of the State in which the facility is located. Agencies should encourage all operators to become State certified even in those States where certification is voluntary.

## K ARS CLEAN WATER ACT PROGRAM (Continued)

### 11 Monitoring

The minimum frequency of effluent quality tests will be as specified in the NPDES permit or that which is necessary to provide optimum performance of the facility. The frequency of operation and control tests will be established in the 404 permit for dredged and fill activities.

Test results of all control and effluent quality tests will be recorded on applicable EPA, COE, State or agency forms. Forms will be maintained as a record to show compliance with regulations or standards.

Where test results indicate noncompliance or inadequate performance, measures shall be taken to correct the situation.

## 12 Reporting

### a Legal and Regulatory Reports

ARS shall comply with all water pollution reporting requirements in accordance with applicable Federal and State regulations. Monitoring information required by NPDES or COE permits will be summarized on the applicable form as prescribed in the individual permit. Completed discharge monitoring reports shall be submitted to the appropriate control agency.

## L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM

### 1 Purpose

To provide direction for implementing an ARS program for complying with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA); to identify and evaluate facilities or activities at ARS facilities which may be in noncompliance with these Acts; and to take corrective actions where necessary to achieve compliance with applicable regulations and standards.

## L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

### 2 Scope

The provisions of this chapter apply to all ARS Locations. To the extent provided by law or contract, contractors performing work for ARS must comply with the legal requirements for the prevention, control, and abatement of pollution, which are outlined in this chapter. There is a certain amount of overlap among and between the various statutes dealing with hazardous and toxic materials. Guidance on oil and hazardous liquid substances Spill Prevention and Contingency Plans is contained in this chapter. Generation, transportation, treatment, storage, disposal, and recycling of hazardous waste is covered in this chapter.

There is also a definite interaction between employee and/or worker protection and environmental compliance contained in these statutes and regulations. The provisions of this section are intended to primarily apply to environmental compliance. However, there is a linkage with worker protection issues. For example, FIFRA has requirements for worker protection during application of pesticides. Both EPA and OSHA requirements apply in handling asbestos and PCB's.

### 3 Objectives

The primary objective of this program is to control hazardous and toxic materials so as to minimize hazards to health and damage to the environment.

The following measures are necessary to achieve the objective:

a Products and facilities developed, constructed and procured by the ARS will be managed to minimize health and environmental hazards during:

(1) research

(2) development

(3) testing

(4) production

(5) use

(6) storage

#### LARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

(7) disposal

b Use of toxic or hazardous materials will be limited to the maximum extent feasible.

c Procedures that provide the utmost safety during storage, use, and disposal of hazardous and toxic materials will be used. This is especially true where less toxic or hazardous substitutes are not available.

d Safe and environmentally acceptable methods will be developed and used to store and ultimately dispose of substances inherently hazardous or potentially dangerous.

e Proper training will be provided for persons who manage, use, store, and dispose of hazardous and toxic materials.

#### 4 Policy

It is ARS policy to adopt all measures consistent with applicable laws, regulations, and executive orders; to control hazardous and toxic materials and substances; to implement best management practices (BMP's) in the research, development, procurement, production, use, handling, storage, and ultimate disposal of hazardous and toxic materials; to give priority to establishing measures required to protect health or control pollution; to use nonhazardous or nontoxic substitutes to the extent

practicable; and to conserve resources and manage hazardous and toxic materials by reprocessing, recycling, and reusing. Where facilities or activities are not in compliance, corrective actions shall be applied which may include technical solutions and management actions that effectively control hazardous and toxic materials in the environment.

#### 5 Definitions

Refer to the statutes or Code of Federal Regulations, 40 CFR Parts 150-180, and 40 CFR Parts 61 and 761 for definitions of specific terms.

## L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

### 6 Responsibilities

a Area Directors, will:

(1) Establish a program to control hazardous and toxic materials management to protect the health and welfare of people and the environment.

(2) Program and budget for resources required for hazardous and toxic materials management and pesticide programs.

(3) Comply with all Federal, State, local and ARS requirements on the handling, use, storage, and disposal of hazardous and toxic materials.

(4) Initiate proper procedures to protect the health and welfare of employees who are exposed to hazardous and toxic substances, including certification in pest management activities.

## 7 Toxic Substance Control Act (TSCA)

### a General

The TSCA provides for the regulation of chemical substances that present a hazard to human health or the environment. The principal mechanism of control is EPA's regulation of chemicals in commerce. This includes regulations covering the manufacture, processing, or commercial distribution of chemical substances and mixtures. The EPA also regulates the use and disposal of certain substances by noncommercial

entities, including Federal agencies. The ARS concerns primarily involve the provisions of the statute and regulations covering facilities and sites which may contain Polychlorinated biphenyls (PCB's) and asbestos. However, other provisions of TSCA may apply to certain agency activities.

### b Standards

(1) PCB's. National standards and requirements have been promulgated for the control of PCB's in manufacturing, processing, distribution in commerce, and use. Regulations have been developed which



also cover marking, storage,

#### L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

disposal, and decontamination of PCB's and PCB items. These latter items are most pertinent to ARS and component agencies for existing equipment and products which may be defined as "PCB-contaminated". Items of concern may include electrical transformers, capacitors, motors, circuit breakers, regulators, switches and microwave ovens and fluorescent light ballasts and fixtures. See 40 CFR Part 761 for details.

(2) Asbestos. Regulations and standards covering exposure to asbestos have been promulgated by EPA and OSHA. Emissions of asbestos to the ambient air are controlled under Section 112 of the Clean Air Act and regulations which establish National Emission Standards for Hazardous Air Pollutants (NESHAP'S). These regulations specify control requirements for most asbestos emissions, including work practices to be followed to minimize the release of asbestos fibers during handling of asbestos waste materials. The regulations do not specify a safe threshold level for airborne asbestos fibers. However, EPA intends to amend the regulation to conform to the OSHA standard. See 40 CFR Part 61 and Chapter III ARS Asbestos Management Program of Section C - Industrial Hygiene Function for details.

The OSHA regulations establish standards to protect workers handling asbestos or asbestos containing products. These regulations include a maximum workplace airborne asbestos concentration limit of 2 fibers/cc with an action level of 0.1 fibers/cc, calculated as an 8-hour time weighted average exposure limit. Also included are requirements for respiratory protection and other safety equipment and work practices to reduce indoor asbestos dust levels. See 29 CFR Part 1910 for additional details.

The EPA has also promulgated under TSCA a regulation covering asbestos construction materials used in schools. While this regulation only applies to friable asbestos containing-materials in public

#### L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

and private schools, the information and guidance could be used for other public buildings. See 40 CFR Part 763.

## 8 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

### a General

The basic purpose of FIFRA is to regulate the production, distribution, commerce, sale, use, and disposal of pesticides. Among other items, FIFRA provides for the following:

- (1) A coordinated Federal/State program to control the use of all pesticides.
- (2) Registration and reregistration of all pesticides.
- (3) Classification of pesticides for "general" or "restricted" use.

(4) Certification of applicators who handle "restricted" use pesticides.

(5) Civil or criminal penalties for misuse of pesticides.

(6) Establishment of safety standards for use of pesticides in the environment.

(7) Control of the manufacturing of all pesticides.

(8) Cancellation of uses of pesticides that cause or may cause unreasonable adverse effects on human health and the environment.

#### b Standards

National standards and requirements have been promulgated for the control and use of pesticides. Applicable standards are detailed herein.

## (1) Pesticide Registration and Classification Procedures

This describes the information that an applicant must submit for registration, amended registration, or reregistration.

### L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

It also describes the procedures by which data submitted may challenge registration actions. See 40 CFR Part 152 for details.

## (2) Data Requirements for Registration

This specifies the types and minimum amounts of data and information the EPA requires in order to make regulatory decisions concerning the risks and benefits of various types of pesticide products. It also specifies the types and minimum amounts of data the EPA requires to determine whether or not to approve applications for experimental use permits. See 40 CFR Part 158 for details.

## (3) Laboratory Practice Standards

This prescribes laboratory practices for conducting studies that support or are intended to support applications for research or marketing permits for pesticide products regulated by the EPA. See 40

CFR Part 160.

(4) Enforcement of the Federal Insecticide, Fungicide and Rodenticide Act

This prescribes the substantive regulations, provisions and requirements for implementing the statute. It includes among other items, the procedures for product registration, exemptions from registration, labeling requirements, pesticide use classification, guarantees and criteria for determining unreasonable adverse effects. It also includes specific guidelines for registering pesticides, requirements for State registration to meet special local needs and conditional registration procedures. See 40 CFR Part 162.

(5) Recommended Procedures for the Disposal and Storage of Pesticides and Pesticides Containers

This prescribes recommended procedures and criteria for the disposal of pesticides, pesticide containers and residues, and pesticide related wastes. It also provides similar information on storage.

L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

These procedures apply to all pesticides, pesticide containers, and pesticide wastes except for the following: disposal procedures do not apply to pesticides containers registered for use in the home if properly disposed of during routine municipal solid waste disposal, nor to containers of pesticides used on farms or ranches where disposal by open-field burial of single containers is done with due regard to surface and ground water protection. This also provides procedures for EPA to accept for safe disposal a pesticide for which the registration is canceled under Section 6(c) of FIFRA. See 40 CFR Part 165. ARS activities do not qualify for the designated farm or ranch exemption.

#### (6) Exemption of Federal and State Agencies for Use of Pesticides Under Emergency Conditions

The EPA may exempt a Federal or State agency from the requirements of the Act if it is determined that emergency conditions exist which may require the exemption. An emergency may be deemed to exist when:

(a) a pest outbreak has or is about to occur and no pesticide registered for the particular use, or alternative method of control, is available to eradicate or control the pest.

(b) significant economic or health problems will occur without the use of the pesticide.

(c) the time available from discovery or prediction of the pest outbreak is insufficient for a pesticide to be registered for the particular use.

This provides the procedures that Federal or State agencies must follow in requesting an exemption for an emergency. See 40 CFR Part 166 for details.

## L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

### (7) Certification of Pesticide Applicators

This deals with the certification of applicators of restricted use pesticides. It includes the categorization of commercial applicators of pesticides and standards for certification of commercial and private applicators. This also includes requirements for Federal employees who use or supervise the use of restricted use pesticides and are certified in accordance with the Government Agency Plan (GAP). See 40 CFR Part 171 for details. The certification requirement applies to both ARS employees and contractors.

### 9 Compliance With Standards

#### a General

Hazardous material management procedures in this part are presented as preferred methods. By these procedures, the requirements of the environmental standards and the objectives of ARS policies can be achieved.

ARS activities, or facilities that store, handle or transfer hazardous substances will include within their contingency plans, procedures to prevent, control, and report accidental releases

of these substances to the environment. Corrective action measures to eliminate performance deficiencies in spill prevention and containment structures will be accomplished as necessary to prevent costly spill cleanup requirements.

Storage facilities for substances hazardous to health and welfare and detrimental to the environment will be constructed and operated in accordance with requirements in 29 CFR 1910 and other applicable regulations. As a minimum, storage facilities must consider the following:

(1) Compatibility of chemicals.

(2) Ventilation.

(3) Fire protection.

(4) Containment.

L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)



(5) Protection from the elements.

National Fire Protection Agency (NFPA) technical pamphlets may be referenced for guidance on storage of hazardous substances.

Proper safety materials and protective clothing and equipment will be maintained for emergency cleanup, treatment, and decontamination. Area warning signs and labels will be posted as necessary.

No hazardous material, or its container, that will cause adverse effects on the environment, will be used or disposed of in a manner that is not in compliance with:

(1) Instructions on the label.

(2) Use or disposal procedures and standards established by appropriate regulations.

b Specific

(1) Polychlorinated Biphenyls (PCB's)

Handling, use, storage, and disposal of PCB's and PCB items or equipment containing PCB's, will be in accordance with regulations established by:

(a) Toxic Substance Control Act.

(b) Resource Conservation and Recovery Act.

(c) Other applicable regulations.

(2) Asbestos

Handling, use, storage, and disposal of asbestos, asbestos-containing products, and asbestos waste materials will be in accordance with regulations established by:

(a) Toxic Substance Control Act.

(b) Clean Air Act.

(c) Resource Conservation and Recovery Act.

#### L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

(d) Occupational Safety and Health Standards.

(e) Other applicable regulations.

#### (3) Pesticides

The principle of integrated pest management (IPM) will be used in all pest management programs to the maximum extent feasible. Pesticides will be used in IPM programs only when essential.

- (a) When pesticides are applied, only Federal or State approved products will be used.
- (b) Product use will be according to the current registration, label directions, or other requirements.
- (c) Storage, handling, use, and disposal of pesticides and pesticide contaminated material will comply with appropriate regulations.
- (d) Only trained applicators will apply pesticides.
- (e) Only certified applicators will apply pesticides classified as "restricted-use".
- (f) Contract pesticide application will be closely supervised and/or monitored by Federal agency personnel.

## 10 Technical Assistance

Assistance and technical publications may be obtained from the EPA through their Regional Office Federal Facility Coordinators or from State or local agencies.

## 11 Pesticide Applicator Training and Certification

ARS personnel involved in using or supervising the use of restricted-use pesticides must be certified under an EPA approved Federal agency plan such as those established by the Forest Service or the Animal and Plant Health Inspection Service. Personnel may also be certified under EPA approved

### L ARS HAZARDOUS AND TOXIC MATERIALS MANAGEMENT PROGRAM (Continued)

State programs if appropriate. ARS applicators should receive the training necessary to meet the appropriate pesticide certification program requirements.

## 12 Reporting

### a Legal and Regulatory Reports

ARS facilities shall comply with all hazardous waste management reporting requirements, including FIFRA and TSCA, in accordance with applicable Federal and State regulations.

## M ARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT PROGRAM

### 1 Purpose

To provide direction for implementing an ARS Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Program; to define actions to identify and evaluate inactive hazardous waste disposal sites at ARS facilities; to take remedial actions where necessary to prevent or

mitigate hazardous substance releases from such sites; and to comply with the requirements of the National Contingency Plan (NCP).

### 2 Scope

The provisions of this section apply to all ARS Locations. To the extent provided by law or contract, contractors performing work for ARS must comply with the legal requirements for the prevention, control, and abatement of pollution, which are outlined in this section.

### 3 Objectives

The primary objectives of this program are to provide ARS support of the National policy to prevent the uncontrolled release of oil and hazardous substances and provide for a prompt, coordinated response to contain and clean up releases should they occur. The following measures are necessary to achieve the objective:



in reporting and responding to releases or threatened releases from hazardous substances from any ARS facility.

Compliance with the NCP will include:

a Establishment and maintenance of a capability to contain and cleanup ARS-caused uncontrolled releases of oil and hazardous and toxic substances that occur at or near ARS facilities. This capability will be able to respond to emergency situations.

b Assistance will be provided to contain and cleanup non-ARS-caused spills under the NCP. This assistance will be consistent with ARS operational commitments.

## 5 Definitions

Refer to the statute, Code of Federal Regulations, and EPA's, "Federal Facilities Program Manual for Implementing CERCLA" for the definitions of specific terms.

M ARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND



## LIABILITY ACT PROGRAM (Continued)

### 6 Responsibilities

a Area Directors will:

- (1) Program and budget sufficient funding and personnel resources for CERCLA projects, as required, to assure timely compliance with response actions.
- (2) Identify and quantify all CERCLA related projects. Determine proper actions (on a program level) to eliminate or reduce contamination to acceptable levels.
- (3) Provide consultation to field installations on CERCLA program activities.
- (4) Monitor field installations CERCLA programs to evaluate effectiveness of compliance; recommend corrective measures when necessary.
- (5) Comply with the requirements of the NCP.

## 7 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

### a General

The basic purpose of the CERCLA is to address problems associated with uncontrolled hazardous waste sites and to respond to releases or threatened releases of hazardous substances (in certain established reportable quantities) through notification to the National Response Center (NRC).

The CERCLA was not structured to set standards or grant permits. It is designed to establish the legal and institutional mechanism to cleanup sites and to implement remedies to prevent or mitigate releases or threatened releases from abandoned hazardous waste sites. It also provides for direct Federal corrective responses for abandoned or uncontrolled waste sites through establishment and use of a response trust fund (Superfund).

MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
LIABILITY ACT PROGRAM (Continued)

The Superfund Amendments and Reauthorization Act (SARA) of 1986 made a number of significant changes which resulted in a broad expansion of CERCLA. In general, SARA sets strict standards for cleaning up hazardous waste sites and stresses the use of permanent cleanup methods. The Act also provides new authorities for cleanup of leaking underground storage tanks and an emergency planning and community right-to-know program. Title III of SARA is the Emergency Planning and Community Right-To-Know Act. It is not intended to include the detailed requirements of this Act under this section. However, an overview is provided later in this section. Included among the major provisions of SARA in regard to response actions are the following items:

(1) Cleanup Standards. Section 121 establishes numerous requirements relating to the degree of cleanup for remedial actions under CERCLA. In addition to codifying many of the existing requirements under the NCP, this section also establishes additional directives for selecting permanent remedies, for meeting State requirements, and for formalizing

the role of the State in the cleanup process.

(2) Mandatory Schedules. Section 116 establishes goals and mandatory schedules that are required to be followed for various phases of remedial responses.

Goals for Certain CERCLA Activities:

(a) Completion of preliminary assessments for all facilities on EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) as of the date of enactment of SARA, by January 1, 1988.

(b) Completion of site inspections for all facilities where determined necessary, by January 1, 1989.

**MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
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(c) Evaluation through a Hazard Ranking System (HRS) where determined necessary, for all facilities on CERCLIS as of the date of enactment of SARA, within 4 years of enactment. For facilities listed on CERCLIS after enactment, within 4 years after listing, if determined necessary.

**Mandatory Schedules for Facilities on the National Priority List (NPL).**

(a) Commencement of new remedial Investigation/Feasibility Study (RI/FS) for 275 sites within 3 years of enactment.

(b) Commencement of substantial and continuous physical on-site new remedial actions at:

1) 175 sites during the first 3 years after enactment.

2) An additional 200 sites during the following 2 years.

For RI/FS' additional scheduling is mandated if the initial schedule is not met.

Specific requirements for Federal facilities are discussed later in this section.

### (3) Natural Resources Damages

The SARA clarifies the roles of Federal and State trustees in performing natural resource damage assessments. It denies access to the use of trust fund money for natural resource damage claims by Federal and State trustees. It also establishes a Federal statute of limitations for filing such claims, which is applicable under certain circumstances.

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## LIABILITY ACT PROGRAM (Continued)

### (4) Contractor Indemnification

Section 119 establishes a Federal liability standard for Superfund response action contractors and authorizes the President to indemnify these contractors subject to certain restrictions.

### (5) Access and Information Gathering

Section 104 expands the President's authority to obtain certain information and to gain access to sites to take or determine the need for taking a response or enforcement action under CERCLA.

### (6) Removal Authorities

Section 104(e) expands the President's removal authorities by increasing the existing dollar and time limitations on removal actions from 6 months and \$1 million to 1 year and \$2 million. It also allows these limitations to be waived altogether where a removal is otherwise appropriate and consistent with future remedial actions.

Authorities provided the President throughout the statute have been delegated to the Administrator of EPA and others by

E.O. 12580. Certain functions of the statute have also been delegated to the heads of Executive Departments and Agencies.

#### b National Oil and Hazardous Substance Contingency Plan (NCP)

The NCP is the implementing regulation for conducting response actions under CERCLA and the Clean Water Act (CWA). The plan specifies procedures, techniques, materials and equipment to be used in identifying, evaluating, and preventing or mitigating releases or threat of releases of hazardous substances and oil. Response actions include both removal and remedial activities regarding clean-up of oil spills and hazardous waste sites.

#### MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT PROGRAM (Continued)

Key provisions of the NCP include:

(1) Subpart B. Describes the duties of the President delegated to Federal agencies and the specific roles and responsibilities of Federal agencies in implementing the NCP. The section provides the

organization elements of the national response structure which includes the National Response Team (NRT), Regional Response Team's (RRT's), On Scene Coordinators (OSC's) and Remedial Project Managers (RPM's). It includes general information on State and non-governmental participation and community relations. It also includes ARS responsibilities and capabilities.

(2) Subpart C. Provides information on the requirements for emergency preparedness, including contingency plans, emergency planning committees and hazardous substances listings. It includes the identification of facilities that covered by the plan and reporting requirements for facility owners and operators.

(3) Subpart D. Provides the operational response phases for oil removal. It covers discovery and notification, preliminary assessment and initiation of action, and containment, countermeasures, cleanup and disposal. It also includes criteria for documentation and cost recovery.

(4) Subpart E. Establishes methods and criteria for determining the appropriate response to a release or threatened release of a hazardous substance. It includes information on the following:

(a) Discovery.

(b) Notification.



(c) Removal procedures.

(d) Site evaluation.

(e) Establishing priorities.

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(f) Remedial Investigation/Feasibility Study (RI/FS).

(g) Selection of remedy/remedial action.

(h) Operation and maintenance.

(5) Subpart F. This is a new NCP subpart. It establishes a mechanism to help ensure that all States are provided an opportunity for "meaning and substantial response," primarily in remedial and enforcement actions.

(6) Subpart G. Designates Federal and State trustees and outlines trustee responsibilities when natural resources are lost as a result of an oil discharge or release of a hazardous substance.

The NCP applies to all ARS Locations. Details on procedures and requirements are contained in the "Plan" itself. The NCP is codified in 40 CFR Part 300.

#### c Designation, Reportable Quantities, and Notification

This regulation designates hazardous substances under Sections 102(a) and 101(14) of CERCLA, identifies reportable quantities for these

substances, and establishes notification requirements for releases of these substances. It also establishes reportable quantities for hazardous substances under Section 311(b)(2)(A) of the CWA. Hazardous substances and reportable quantities are listed in 40 CFR Part 302, Table 302.4.

#### (1) Determination of Reportable Quantities

(a) Listed hazardous waste.

The quantity listed as "Final RQ" for each substance in Table 302.4 is the reportable quantity for that substance.

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(b) Unlisted hazardous waste.

Unlisted hazardous substances designated by 40 CFR 302.4(b), which substances are wastes prior to their initial release into the environment, have the "RQ" of 100 pounds, except for those unlisted hazardous wastes exhibiting the characteristic of toxicity (TC). These wastes have the RQ listed in Table 302.4 for the containment on which the EP toxicity is based.

(2) Notification

Any person in charge of a facility shall, as soon as he/she has knowledge of any release of a hazardous

substance in a quantity equal to or exceeding the reportable quantity in any 24-hour period, immediately notify the National Response Center (NRC) in Washington, D.C. by calling 800-424-8802.

#### d Penalties

Any person in charge of a facility from which a hazardous substance is released who fails to notify the NRC shall be subject to all of the sanctions, including criminal penalties, set forth in Section 103 of CERCLA with respect to such failure to notify.

#### e Exception

This section does not apply to the application of a pesticide product registered under the FIFRA, or to the handling and storage of such a pesticide by an agricultural producer. This exception applies only to the use of a pesticide product and does not apply to pesticide waste disposal or spills.

### 8 Title III - Emergency Planning and Community Right-To-Know Act

#### a General

Title III of SARA is intended to encourage and support emergency planning efforts at the State and local levels. It provides citizens and

#### **MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT PROGRAM (Continued)**

local governments with information concerning potential chemical hazards present in their communities. It provides a mechanism for responding to releases of acutely hazardous materials which may endanger the surrounding community. Title III is organized into three subtitles as follows.

##### **b Subtitle A - Emergency Planning and Notification**

Subtitle A establishes State Planning Commissions, planning districts, and local planning committees with responsibilities for developing and coordinating emergency response plans. Facilities that have hazardous substances in amounts greater than the "threshold planning quantity" established by the EPA, must provide specific information to their local communities. Environmental releases of hazardous substances greater than the "reportable quantity", also set by EPA must be immediately reported to local communities and the State Planning Commissions. EPA has established planning and reporting quantities for over 400 chemicals.

##### **c Subtitle B - Reporting Requirements**

Subtitle B requires the submission of hazardous chemical material safety data sheets (MSDS's) by any facility which is required to have these sheets under the Hazard Communication Standard (29 CFR

1910.1200) of OSHA. Material data

safety sheets are to be provided to the local committee, the State Commission, and the fire department having jurisdiction over the facility.

The scope of the OSHA Hazard Communication Standard has been expanded to cover all industries, including agriculture. Under Subtitle B, a facility may elect to submit a list of the chemicals for which they have MSDS's, in lieu of submitting individual MSDS's. In addition to MSDS's, facilities must prepare and submit chemical inventory forms to the same authorities designated to receive MSDS's. Facilities must submit a "Tier I" form with general information on the amount and location of hazardous chemicals by category and, if requested, a "Tier II" form containing more detailed information on individual chemicals.

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These forms and associated regulations were issued by EPA in October, 1987 (52 Fed. Reg. 38344).

#### d Subtitle C - General Provisions

Subtitle C covers general provisions concerning trade secret protection, enforcement, citizen suits, and availability of information to the public. The public has access to most Title III information from local planning committees and State Commissions.

#### e Exemptions

Both SARA Title III and the OSHA Hazard Communication Standard exclude certain substances from the definition of "hazardous chemical". These substances are exempted from Title III reporting requirements for MSDS's and Tier I and Tier II forms. The exemptions are:

(1) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.

(2) Any substance present as a solid in manufactured items to the extent exposure to the substance does not occur under normal conditions of use.

(3) Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.

(4) Any substance to the extent that it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.

(5) Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

(6) Any hazardous waste regulated as such by the EPA under RCRA.

#### MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT PROGRAM (Continued)

(7) Tobacco products.

(8) Wood and wood products.

#### 9 CERCLA Implementation

Section 120 of SARA establishes specific requirements for Federal facilities and defines the process by which Federal agencies are required to undertake remedial actions at their facilities. These include the following:

##### a General

Confirmation that CERCLA is applicable to Federal facilities as follows: each Department, agency, and instrumentality of the United States shall be subject to, and comply with the Act in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity, including liability under Section 107 of the Act.



## b Application of Requirements

All guidelines, rules, regulations and criteria shall apply to facilities which are owned or operated by a Federal agency in the same manner and to the extent as they apply to other facilities with the following exceptions:

(1) Requirements shall not apply with respect to applicable time periods.

(2) Requirements shall not apply relating to bonding, insurance, or financial responsibility.

## c State Laws

State laws concerning removal and remedial actions, including enforcement, apply to facilities owned or operated by a Federal agency when such facilities are not included on the NPL. States can not apply any standards or requirements to Federal facilities that are more stringent than those applied to non-federal facilities.

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d Notification

Requires Federal agencies to submit information for an inventory of hazardous waste facilities which includes:

(1) Information required under Section 3016(a)(3) of the Solid Waste Disposal Act (SWDA).

(2) In addition, information on contamination from any Federally owned or operated facility, if such contamination affects contiguous or adjacent property, owned either by the Government or by any other person.

e Federal Agency Hazardous Waste Docket

Requires the EPA to establish a public docket which includes the following:

(1) All information submitted under Section 3016 of the SWDA and notice of each subsequent action taken for a facility.

(2) Information submitted by a Federal agency under Sections 3005 or 3010 of the SWDA.

(3) Information submitted by a Federal agency under Section 103 of CERCLA.

The EPA is also required to update this docket every 6 months.

f Schedule for Response Actions

(1) Requires EPA to:

(a) Assure a preliminary assessment is conducted at each facility on the Federal Agency Hazardous Waste Docket within 18 months of the enactment of SARA.

(b) Where appropriate, evaluate facilities for possible inclusion on the NPL, within 30 months of the enactment of SARA.

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For the purpose of meeting the requirements of the statute this date is April 17, 1988.

(c) Review results of Federal agency's Remedial Investigations/Feasibility Studies (RI/FS).

(2) Requires a Federal agency to:

(a) Begin an RI/FS within 6 months of listing a facility on the NPL.

(b) Enter into an Interagency Agreement with the EPA within 6 months of EPA's review of the completed RI/FS.

The Interagency Agreement shall include:

1) Review of remedial action alternatives with a joint selection of remedy or if unable to reach agreement on the selection of a remedial action, following the resolution process under E.O. 12580.

2) A schedule for completion of the remedial action.

3) Arrangements for operation and maintenance of the facility.

(c) Begin onsite remedial action within 15 months after completion of the RI/FS.

(d) Report annually to Congress on progress in implementing these requirements.

10 ARS CERCLA Program Execution

The ARS CERCLA program shall be accomplished in accordance with the following and as outlined in the NCP. The CERCLA response actions include both removal actions and remedial actions. Although activities under either action may coincide or overlap to some degree these response actions will be treated separately for purposes of clarity.

#### M ARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT PROGRAM (Continued)

##### a Phase I - Site Discovery and Notification

This phase is to locate and identify those sites that may pose a threat to the public health or welfare or the environment from a release or a threatened release of a hazardous substance or pollutant or contaminant.

This applies to either a removal or a remedial action.

A release may be discovered through any of the following:

(1) Notification in accordance with Sections 103(a) or 103(3) of CERCLA.

(2) Investigations conducted in accordance with Section 104(e) of CERCLA or other statutory authority.

(3) Notification of a release by a Federal or State permit holder as required by the permit.

(4) Inventory or survey efforts or random or incidental observation by Federal agencies or the public.

(5) Submission of a citizen petition requesting a Preliminary Assessment under Section 105(d) of CERCLA.

(6) Other sources.

For the inventory and survey effort under Item d the Site Discovery shall, as a minimum include:

(a) Interviewing present and former employees who may have knowledge of operations or conditions that may contribute to the purpose.

(b) Collecting for review and analysis applicable site/facility information, such as:

1) Site-specific National Environmental Policy Act documentation.

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2) Environmental monitoring program documentation.

3) Effluent/emission monitoring program documentation.

4) Federal, State, and local permit documentation.

5) Records (past and present) of hazardous waste operations.



- 6) Process and shipment records relevant to waste generation.
- 7) Site development or facility operation and maintenance plans and documents.
- 8) Reports of spills and other releases.
- 9) Contingency/emergency plans.
- 10) Safety inspection documentation.

(c) Determining past management practices regarding use, storage, treatment, and disposal of hazardous substances from development, production, and laboratory operations. This review should include the identification of landfill and burial sites that potentially may have received hazardous substances for disposal. It should also include other possible sites that may possibly be contaminated from spills or releases of hazardous substances, and where cleanup in accordance with EPA guidance and individual agency standards has not been accomplished.

#### b Phase II - Site Evaluation

This phase is to evaluate releases through a Preliminary Assessment and/or Site Inspection to ascertain the presence or absence of a threat or potential threat to public health or welfare or environment and to determine if a site merits further action. Whether the site is handled as

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a removal and or a remedial action is dependent upon the nature of the site and the hazard(s) involved.

### (1) Removal Preliminary Assessment (PA)

A removal PA may include but is not limited to:

- (a) Identification of the source and nature of the release or threat of release.
- (b) Evaluation by Federal or State public health agencies of the threat to public health.
- (c) Evaluation of the magnitude of the potential threat.
- (d) Evaluation of factors necessary to make a determination of whether a removal is necessary.

(e) Determination of whether a non-federal party is undertaking an adequate response.

(f) Collection and review of data from:

1) Site management practices

2) Generator information

3) Photographs

4) Analysis of historical photographs

5) Literature searches

6) Personal interviews

## (2) Removal Site Inspection (SI)

A removal SI is performed if additional information is needed. This inspection may include a perimeter (off-site) survey, or an on-site inspection if such an inspection can be performed safely.

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The NCP lists the conditions for which the site evaluation phase shall be terminated. A Phase I report should be prepared which documents the findings and presents conclusions and recommendations.

## (3) Remedial Preliminary Assessment

A remedial preliminary assessment is intended to be a review of readily available information to determine if a site merits further action. The basic purpose of a remedial preliminary assessment (PA) is to:

- (a) Eliminate from further consideration those sites where available data indicates no threat or potential threat to public health or the environment.

(b) Determine if there is any potential need for corrective action.

(c) Establish priorities for site inspections.

(d) Gather all appropriate existing data to evaluate the release relative to a Hazard Ranking System.

Various steps may be performed to obtain the information necessary to develop and prepare a remedial PA report. The report should include the following:

(a) A description of the site release.

(b) A description of the probable nature of the site release.

(c) A description of whether or not further action is warranted and if so, which lead agency should carry it out and what is the nature of the further action.

Data to respond to the above criteria can be obtained from the following:

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- (a) Telephone interviews with Federal, State, and local government personnel.
- (b) Review of Federal, State, and local government files, reports and court cases.
- (c) Review of geological, hydrological, and topographical data.
- (d) Review of State and local private and public well logs.
- (e) Review of Federal and local planning agencies.

(f) Review of available aerial imagery.

(g) Review of flood insurance rate maps.

(h) Review of data concerning site management practices.

(i) A perimeter (off-site) inspection.

A preliminary assessment report should be prepared which documents findings and recommendations for any further action. For those sites showing insignificant potential, no further action should be recommended.

#### (4) Remedial Site Inspection

A SI should be performed on all sites recommended for further action upon completion of a preliminary assessment. The primary purposes of an SI are to:

(a) Eliminate from further consideration those sites which pose no threat to public health or the environment.

(b) Determine the potential need for removal action.

(c) Collect or develop additional data to evaluate a site pursuant to Hazardous Ranking System (HRS).

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(d) Collect data, as appropriate, beyond that which is required for hazard ranking, in order to better characterize a site for more effective and rapid initiation of a Remedial Investigation/Feasibility Study (RI/FS).

Steps to acquire the information necessary to complete an SI report may include:

(a) Conducting personal interviews with local officials.



- (b) Field measurement of ambient conditions.
- (c) Documentation of condition of waste materials, topography, geology, and hydrology.
- (d) Documentation of locations of residences, public buildings, natural resources areas, etc.
- (e) Scanning of site with metal detectors for underground tanks or drums (if appropriate).
- (f) Review of operations records.
- (g) Collection of on and off-site surface water, ground water, air, soil, and leachate samples.
- (h) Analysis of samples and quality assurance/quality control review.
- (i) HRS scoring (preliminary-Site Screening Analysis).

The SI report should include, as a minimum:

- (a) A description/history/nature of waste handling.
- (b) A description of pathways of migration of contaminants.
- (c) An identification and description of human and environmental impacts.

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- (d) A recommendation on whether further action is warranted.

**(5) Eligibility for the National Priorities List (NPL)**

A site may be included on the NPL if it meets one of the following criteria:

(a) The site scores sufficiently high pursuant to a hazard ranking system.

(b) A State has designated a release as its highest priority (a State may make only one such designation).

(c) The site meets all of the following:

1) The Agency for Toxic Substances and Disease Registry has issued a health advisory that recommends dissociation of individuals from the site.

2) EPA determines that the release poses a significant threat to public health.

3) EPA determines it is most cost-effective to use its remedial authority to respond at the site.

Federal agencies may submit candidate NPL sites to EPA by scoring the site using a HRS and providing appropriate documentation. Candidate site(s) may be submitted at any time.

Federal facilities that meet the criteria will be included on the NPL. However, Federal facilities are not eligible for Superfund-financed remedial actions.

Sites may be deleted from the NPL when no further response is appropriate. Procedures for deleting a site are covered in the NCP.

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##### (6) Hazard Ranking System (HRS)

The HRS was designed by EPA, to assist them in identifying those releases or potential releases of hazardous substances that pose the greatest hazard to humans or the environment. It is also used as a guide to prioritize a list of sites eligible for the National Priorities List and possible CERCLA-funded remedial actions. Corrective actions at Federally-owned facilities are specifically prohibited from using "Superfund" monies.

Use of the HRS by ARS agencies is optional. However, this site rating system does provide a process for determining the relative potential of environmental impact at a particular site and may provide a useful tool in agency decision making. The HRS scoring process is described in detail in the Uncontrolled Hazardous Waste Site Ranking System, a Users Manual, issued by EPA.

#### c Phase III A - Site Removal Action

The purpose of Phase III A is to cleanup or remove releases of oil or hazardous substances, including monitoring and assessments, disposal of removed material and other actions which may be necessary to prevent, minimize, or mitigate damage to public health or welfare or the environment.

The following factors shall be considered in determining the need for a removal action:

(1) Actual or potential exposure to hazardous substances or pollutants, or contaminants of nearby populations, animals, or food chain.

(2) Actual or potential contamination of drinking water supplies or sensitive ecosystems.

(3) Hazardous substances or pollutants or contaminants in drums, barrels, or other bulk storage containers, that pose a threat of release.

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(4) High levels of hazardous substances, oil, etc., in soils largely at or near the surface that may migrate.

(5) Weather conditions that may cause hazardous substances, oil, etc., to migrate or be released.

(6) Threat of fire or explosion.

(7) The availability of other Federal or State response mechanisms to act.

(8) Other situations that may pose a threat to public health or welfare or the environment.

When a determination is made to proceed with a removal action, work should begin as soon as possible to prevent, minimize, or mitigate the threat.

Any removal actions should, to the extent practicable, contribute to the solution of any anticipated

longer term remedial action. Examples of types of removal actions are listed in the NCP.

#### d Phase III B - Site Remedial Investigation/Feasibility Study (RI/FS) and Selection of Remedial Action

The purpose of Phase III B is to develop a plan for corrective action, by evaluating alternative technologies for preventing or mitigating the release of hazardous substances and for selecting a remedial action.

##### (1) General

This process consists of the following basic components. The process is iterative and some components may overlap or be conducted concurrently:

(a) Scoping of the RI/FS.

(b) Site characterization.

(c) Development of alternatives.

(d) Initial screening of alternatives.

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(e) Post-screening field investigation.

(f) Detailed analysis of alternatives.

(g) Selection of remedy.

**(2) Scoping**

This component involves examining available information and developing workplans that will serve as the basis for:



(a) Determining if site conditions require an immediate removal action.

(b) Identifying any other Federal or State response or enforcement entities.

(c) Identifying the possible RI/FS study area.

(d) Establishing preliminary priorities for action items.

(e) Developing sampling and analysis plans.

Prior to conducting field activities for the RI the Federal agency shall:

(a) Conduct interviews with local officials, public interest groups, residents and other interested or affected parties to solicit their input and involvement.

(b) Prepare a Community Relations Plan or equivalent document.

(c) Establish as a minimum, one local information repository.

(3) Site Characterization

(a) Phase I Remedial Investigation (RI)

The following factors should be considered to determine the extent to which a site poses a threat to human health or the environment:

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1) The extent to which the source of the release can be adequately identified and characterized.

2) The amount, concentration, toxicity, environmental fate and transport, form, and other significant characteristics of the substance(s) present.

3) Waste mixtures, the media of occurrence, and interface zones between media.

4) Hydrogeological factors.

5) Climate.

6) Routes of exposure.

7) Population(s) and environmental concerns at risk.

8) The extent to which the substances have migrated or can be expected to migrate and the threat such migration may pose to human health or the environment.

9) The extent to which natural or man-made barriers currently contain the substances.

10) Contribution to air, land, water or food chain contamination.

11) Surface water classifications and existing use designations.

12) Ground water characteristics and current and potential ground water use.

13) The extent to which contamination exceeds health or risk-based levels.

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14) Water and soil characteristics that affect the type of treatment possible.

15) The extent to which substances at the site may be reused or recycled.

16) The potential for future releases of any substances or treatment residuals.

If the RI provides adequate information to permit the preliminary identification of potentially feasible alternatives, a Phase I Feasibility Study (FS) should be initiated.

(b) Phase I Feasibility Study

Site cleanup may involve both source control and ground water response actions. Where appropriate, these actions should be formulated together so that a comprehensive site response is developed.

1) Alternatives for source control actions

USDA agencies should develop a spectrum of alternatives that range from a treatment solution that minimizes the need for long-term management, to a treatment solution that reduces the toxicity, mobility of volume of the site waste.

2) Alternatives for ground-water response actions

USDA agencies should develop a number of remedial alternatives which attain maximum contaminant levels within different completion schedules.

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### 3) Other Alternatives

In addition to the alternatives developed in Items 1 and 2, ARS should also develop the following two alternatives for consideration:

a) An alternative which includes containment of waste with little or no treatment, but provides protection of human health and the environment.

b) A no-action alternative.

#### (c) Phase II Feasibility Study Initial Screening of Alternatives

This phase provides for screening the alternatives developed in Phase I to reduce the number of potential remedial alternatives to be considered for a detailed analysis. A containment alternative and a no-action alternative should be continued through the initial screening process.

Alternatives should be evaluated in terms of the following broad general criteria.

1) Effectiveness.

2) Implementability.

3) Cost.

(d) Phase II Remedial Investigation - Post Screening Field Investigation

This phase involves additional field investigation that may be necessary for alternatives that are planned for a detailed analysis. This phase may include:

1) Identification of existing treatment technology data.

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2) Bench and pilot scale treatability tests.

3) Field data to further assess and evaluate site characteristics.

(e) Detailed analysis of alternatives (Phase II FS)

This phase involves a detailed evaluation of the alternatives remaining after completion of the initial screening process. The evaluation should include an examination of each alternative against the following criteria.

1) Effectiveness

a) Degree of protection afforded to human health and/or risk-based levels to be achieved.

b) Protection of the community and workers during remedial actions.



c) Time until proposed action is achieved.

d) Long term reliability.

e) Any potential need for replacement.

f) The toxicity, mobility or volume reduction achieved.

## 2) Implementability

a) Technical feasibility (capability to construct).

b) Short-term reliability.

c) Capability to attain applicable or relevant and appropriate requirements (ARAR's).

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d) Capability to undertake additional remedial actions, if necessary.

e) Capability to monitor the effectiveness of the proposed action.

f) Capability to perform operation and maintenance functions.

g) Administrative feasibility (obtaining necessary approvals).

h) Likelihood of favorable community response.

i) Availability of treatment, storage, and disposal services and capacity.

j) Availability of necessary equipment and specialists.

### 3) Costs

a) Short term development and construction costs.

b) Operating costs for implementing remedial action.

c) Long-term costs for operation and maintenance.

d) Present worth of total project costs.

e) Replacement costs (if the proposed action were to fail).

Alternatives should then be compared to each other and a preferred alternative selected.

#### MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT PROGRAM (Continued)

The final draft of the feasibility study shall be made available for public review and comment, and public meetings should be held as necessary to allow for public input.

A response document shall be prepared which covers the public's significant comments and this document is to be included in the Record of Decision (ROD).

#### (4) Record of Decision

This document will detail the decision process that was followed in selection of the remedy.

#### (a) Selection of a Remedy

The remedy selected shall meet the following criteria:

- 1) Be protective of human health and the environment.
- 2) Attain applicable or relevant and appropriate requirements for the specific site.
- 3) Be cost effective.
- 4) Utilize permanent solutions and alternative technologies to the maximum extent practicable.

#### e Phase IV - Remedial Design/Remedial Action and Operation and Maintenance

The purpose of Phase IV is to develop the actual design of the selected remedy and implement the remedy through construction. It may also include a period of operations and maintenance after completion of construction.

- (1) Procedure. Actions should include:

(a) Design of the selected remedy.

(b) Drawings and specifications necessary to implement the construction.

MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
LIABILITY ACT PROGRAM (Continued)

(c) Final cost estimates.

(d) Implementation of construction through contract or other procurement procedures.

(e) Construction inspection and monitoring.

(f) Reporting in accordance with contractual requirements.

(g) Operation and maintenance for remedial actions involving treatment (or other measures) to restore contaminated ground or surface water

quality, the operation of treatment facilities or other measures for a period of 10 years after completion of construction is considered part of the remedial action.

Activities required to maintain the effectiveness of corrective action measures following the 10-year period, or after remedial action is complete, whichever is earlier, are considered O&M.

The 10-year O&M provision does not apply to:

(a) Ground and surface water measures initiated for the purpose of restoration and not to source control measures initiated to prevent contamination.

(b) Ground or surface water measures initiated for providing a drinking water supply.

Throughout the process involvement of the State and the public must be provided for.

State involvement includes the following significant items.

(a) Participation in RI/FS negotiations.

**M ARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
LIABILITY ACT PROGRAM (Continued)**

(b) Identification of Applicable or Relevant and Appropriate Requirements (ARARs) that need to be considered in the RI/FS.

(c) Comment on proposed alternative(s) and any waivers of State ARARs.

(d) Review and comment on remedial design.

(2) Public involvement



The following items cover activities necessary to provide for the required community/public involvement.

(a) Develop a community relations plan or equivalent and establish an information repository prior to the RI/FS.

(b) Notify public of feasibility study availability and develop a fact sheet for public comment period.

(c) Prepare responsiveness summary for public comments.

(d) Issue public notice and fact sheet on the selection of remedy.

(e) Issue public notice and fact sheet on remedial design.

Additional details are contained in the NCP. The NEPA process may satisfy the public involvement requirements if its procedures are followed.

11 Compliance

a General

ARS is required by Section 107(g) of CERCLA to comply both substantively and procedurally with the statute to the same extent as private entities.

M ARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
LIABILITY ACT PROGRAM (Continued)

The Agency, under the liability provisions of CERCLA, has corrective action responsibilities for all sites on their current and formerly owned properties and for hazards caused by activities at such properties. ARS Locations are also responsible for off-site contamination caused by ARS as well as private sector sites where the Agency contributed hazardous substances.

ARS must comply with SARA and with all Federal, State, or local requirements both substantive and procedural issued under other environmental statutes, with respect to corrective action activities.

b Specific

(1) CERCLA and SARA

The SARA establishes mandatory schedules and deadlines for facilities listed on the Federal Agency Hazardous Waste Docket and the NPL for various phases of the Superfund process. ARS shall make every effort to comply with these requirements.

In addition, for those sites not specifically covered under SARA or by NCP regulation, the following are target dates for CERCLA/SARA compliance:

<u>Phase</u>	<u>Activity</u>	<u>Target Date</u>
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I	Site discovery and Complete within identification	1 year from the date of this Manual.
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II Site evaluation

a	Preliminary assess- Complete within ment (PA)	1 year from the date of discovery.
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b Site inspection (SI) Complete within 1 year after completion of the PA, (if necessary).

M ARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
LIABILITY ACT PROGRAM (Continued)

III

a Removal action Complete as soon as possible after identification of the need.

b Remedial investi- Complete within  
gation/feasibility 2 years after  
study and selection completion of  
of remedial action the SI.

IV Remedial design (RD), Initiate onsite remedial action (RA), action within 1 and operation and year after maintenance of RA completion of the RI/FS.

(2) Spill Prevention Control and Countermeasure (SPCC) Plan

(a) USDA installations with certain nontransportation-related onshore and offshore storage facilities will prepare, maintain, and implement a SPCC plan to prevent and control the accidental discharge of oil and hazardous substances.

(b) These installations and activities will prepare and implement a SPCC plan if oil or hazardous substance storage facilities meet one of the following criteria:

1) Aggregate above ground oil storage at the installation is greater than 1,320 gallons.

2) Any single tank above ground oil storage at the installation is greater than 660 gallons.

3) Total underground oil storage at the installation is greater than 42,000 gallons.

4) One or more hazardous substances stored that would present a threat to human health or the environment if a release should occur.

M ARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
LIABILITY ACT PROGRAM (Continued)

(c) An inventory of all sources of oil and hazardous substances will be contained in the SPCC plan. Measures to prevent and contain an accidental release will be detailed for those sites that are potential sources for harmful discharges.

(d) Completed plans will be fully implemented including required construction, installation of equipment, and training of personnel.

(e) Each SPCC will be certified by a registered professional engineer as having been prepared according to sound engineering practices.

(f) An up-to-date plan will be maintained and available for on-site review by the EPA.

(g) Plans will be reviewed and amended, as required by the EPA when:

- 1) A facility has discharged more than 1,000 gallons of oil into navigable waters in a single spill event.
- 2) Two oil spill events have occurred within any 12-month period.

(3) Minimum Plan Requirements

- (a) An inventory list of storage, handling, and transfer facilities for which a reasonable possibility exists for a release of oil or hazardous substances in harmful quantities.
- (b) A detailed description of equipment and countermeasures, including structures and equipment for diversion and containment of discharges for each listed site.
- (c) A detailed description of corrective measures needed and procedures to be followed to correct any deficiencies at each site. See 40 CFR Part 112 for additional details.

MARS COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND  
LIABILITY ACT PROGRAM (Continued)

(4) Reporting of USDA Oil and Hazardous Substances Releases

(a) For any release of oil or hazardous substance to the environment, actions will be taken to eliminate the source and contain the release. E.O. 12580 delegates to Federal agencies the authority and responsibility for:

1) Removal actions other than emergencies.

2) Remedial actions for release or threatened releases which are not on the NPL.

(b) Spill events and discharges will be reported immediately by telephone to the EPA Regional Office, U.S. Coast Guard District Office, or the National Response Center, Washington, D.C. This will include any observed oil spill or release of hazardous or toxic substance.

1) CERCLA requires immediate notice to the National Response Center for a release of a hazardous



substance in a reportable quantity. Refer to the National Contingency Plan for details and exceptions.

2) A written report will be submitted to the EPA within 60 days after a single discharge of 1,000 gallons or more of oil or two spill events in a 12-month period. The EPA will determine the need for a written incident report for hazardous substances on an individual basis.

## 12 Reporting

### a Legal and Regulatory Reports

ARS shall comply with all CERCLA and NCP reporting requirements in accordance with applicable regulations.